

# Application Note

## Replacement of Power Supplies

Older ICS systems have used power supplies which are now nearing the end of their life or are no longer available. These systems cannot be repaired using direct supply replacement and therefore need alternative supplies.

ICS Triplex Technology recommends the use of T824x series power supplies, which in most cases should fit into spare panel space. Each supply chassis uses 1U of rack space and can fit three 750W supplies, each providing 24V or 28V from one AC feed. A dual supply providing 1500W with a spare supply on each feed can therefore be mounted in 2U of rack space.

These replacement supplies should be fitted completely before transferring duty from the old to the new supplies. Do not fit replacement supplies that partly share duty with existing supplies; nonlinearities in existing supplies may prove difficult to track in the power sharing circuits of replacement supplies, which could cause them to trip on overload.

Note that existing supplies may have their own circuit breakers/isolation switches, bridging diodes and power failure relays. These must be replicated in the new design. T824x series supplies will need circuit breakers. Bridging diodes are only necessary where linking dual redundant supplies into one feed, to protect against an output short in one supply. Each T8240 chassis may be fitted with a T8243 power port which provides failure relays for AC feed and DC output.

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